# NATURAL RESOURCES CONSERVATION SERVICE CONSTRUCTION SPECIFICATION

# **FENCES**

#### 1. SCOPE

The work shall consist of furnishing and installing fences, including gates and fittings, as shown on the drawings.

#### MATERIALS

Materials for fences shall conform to the requirements shown on the drawings. Wooden posts shall be of an acceptable species.

### 3. SETTING POSTS

Concrete posts shall be and wood posts may be set in holes and backfilled with concrete or tamped earth except where otherwise specified. Steel posts shall be and wood posts may be driven unless otherwise specified.

Post holes shall be at least 6 inches larger than the maximum diameter or side dimension of the posts.

Earth backfill around posts shall be thoroughly tamped in layers not thicker than 4 inches and shall completely fill the post hole up to the ground surface. Concrete backfill around posts shall be rodded into place in layers not thicker than 12 inches and shall completely fill the post hole up to the ground surface. Backfill, either earth or concrete, shall be crowned up around posts at the ground surface.

No stress shall be applied to posts set in concrete until at least 24 hours after the concrete has set.

#### 4. CORNER ASSEMBLY

Unless otherwise specified by the NRCS Engineer or the designated representative, corner assemblies shall be installed at all points where the fence alignment changes 15 degrees or more.

#### END PANELS

Unless otherwise specified by the NRCS Engineer or the designated representative, end panels shall be built at gates and fence ends.

## 6. PULL POST ASSEMBLY

Unless otherwise specififed by the NRCS Engineer or the designated representative, pull post assemblies shall be installed at the following locations:

- a. In straight fence sections, at intervals of no more than 660 feet.
- b. At any point where the vertical angle described by two adjacent reaches of wire is upward and exceeds 10 percent (unless otherwise approved by the NRCS Engineer or the designated representative).
- c. At the beginning and end of each curve.

#### 7. ATTACHING WIRE FENCING TO POSTS

The fencing shall be stretched and attached to posts as follows:

- a. The fencing shall be placed on the side of the post opposite the area being protected, except on curves.
- b. The fencing shall be placed on the outside of curves.
- c. The fencing shall be fastened to each end post, corner post and pull post by wrapping each horizontal strand around the post and tying it back on itself with not less than three tightly wound wraps.
- d. The fencing shall be fastened to wooden line posts by means of staples. Woven wire fencing shall be attached at alternate horizontal strands. Each strand of barbed wire shall be attached to each post. Staples shall be driven diagonally with the grain of the wood and at a slight downward angle and shall not be driven so tightly as to bind the wire against the post.
- e. The fencing shall be fastened to steel or concrete line posts with either two turns of I4 gage galvanized steel or iron wire or the post manufacturer's special wire fasteners.
- f. Wire shall be spliced by means of a Western Union splice or by suitable splice sleeves applied with a tool designed for the purpose. The Western Union splice shall have not less than 8 wraps of each end about the other. All wraps shall be tightly wound and closely spaced. Splices made with splice sleeves shall have a tensile strength not less than 80 percent of the strength of the wire.

#### 8. STAYS

Stays shall be attached to wire fencing in a manner to insure maintenance of the proper spacing of the fence wire strands.

9. ADDITIONAL ITEMS WHICH APPLY TO THIS JOB